



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,056	08/10/2001	George T. Hutchings	039362-0070	6943
24375	7590	08/25/2005	EXAMINER	
VOLPE AND KOENIG, P.C. DEPT. MOT UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			LAM, WAI YIP	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/928,056

Applicant(s)

HUTCHINGS, GEORGE T.

Examiner

Wai Lam

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 19, 23 – 25, 28, and 29 are objected to because of the following informalities. Appropriate correction is required.

As to claims 19 and 25, there are improper capitalizations at the beginning of each limitation. The “A” should be changed to “a”.

As to claim 23, 24, 28 and 29, the specification in the application states that the decompression device and the decryption device are located in the wireless video display module and not the “display processing module” as claimed. This objection can be avoided by changing “display processing module” to “wireless video display module”. Claims 23, 24, 28, 29 will be interpreted as “wireless video display module” for the purpose of formulating an action.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3 – 4, 7 – 18, 25 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,708,961 (Hylton et al.).

As to claim 1, Hylton et al. teaches a wireless video display system (Figure 1) for displaying a video image in response to video information generated by a content source (Column 5, lines 42 – 44), the wireless video display system (Figure 1) comprising a display processing module (Unit 10 in Figure 1) for generating processed video information in response to the video information (Column 5, lines 33 - 38).

Hylton et al. also teaches a wireless video display (Unit 100 in conjunction with Unit 103 in Figure 1) module including a display (Unit 103 in Figure 1).

Hylton et al. also teaches a wireless video link (Unit 29 and Unit 27 in Figure 1) for transmitting the processed video information from the display processing module (Unit 10 in Figure 1) to the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1), wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) displays the video image over the display in response to the processed video information (Column 7, lines 66 – 67, Column 8, lines 1 – 10).

As to claim 3, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1) wherein the video information is compressed video information (Column 5, lines 49 – 51), further comprising a decompression device (Unit 129 in Figure 4) for generating decompressed video information, wherein the wireless video display (Unit 100 in

Art Unit: 2614

conjunction with Unit 103 in Figure 1) displays the video image in response to the decompressed video information (Column 8, lines 6 – 10, Column 14, lines 66 – 67).

As to claim 4, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1) wherein the video information is compressed using Motions Picture Expert Group (MPEG) compression techniques (Column 11, lines 58 – 64).

As to claim 7, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), further comprising a decryption device (Unit 207 in Figure 5) for decrypting the video signal (Column 19, lines 13 – 16).

As to claim 8, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), further comprising audio controls (Column 17, lines 27 – 31).

As to claim 9, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), further comprising display controls (Column 16, lines 65 – 67, Column 17, line 1).

As to claim 10, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless

video display system (Figure 1), further comprising cursor functions (Column 16, lines 65 – 67, Column 17, line 1).

As to claim 11, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), further comprising selection functions (Column 8, lines 35 – 45).

As to claim 12, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), wherein the display processing module (Unit 10 in Figure 1) negotiates the wireless video link as a high speed video link. The wireless link in Hylton et al. is a high speed link because it is capable of transmitting broadband data

As to claim 13, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) transmit channel tuning commands to the display processing module (Unit 10 in Figure 1) (Column 8, lines 35 – 45).

As to claim 14, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), wherein the video information generated by the content source has too large a bandwidth to be transmitted over the wireless video link (Column 2, lines 29 – 51), and the display processing

Art Unit: 2614

module (Unit 10 in Figure 1) formats the processed video information to allow it to be transmitted over a wireless video link (Column 6, lines 18 – 34).

As to claim 15, Hylton et al. teaches the limitations corresponding to claims 1 and 14 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), wherein the display processing module (Unit 10 in Figure 1) further comprising a packet identifier (PID) filter (Unit 15 in Figure 1) that filters out information not selected by the user from the processed video information that is transmitted over the wireless video link (Column 6, lines 10 – 15).

As to claim 16, Hylton et al. teaches a method comprising formatting video information in a form that can be transmitted over a wireless video link (Column 6, lines 18 – 34)

As to claim 17, Hylton et al. teaches the limitations corresponding to claim 16 as discussed above. Hylton et al. also teaches a method wherein video information generated by the content source (Column 5, lines 42 – 44) has too large a bandwidth to be transmitted over the wireless video link (Column 2, lines 29 – 51), and the display processing module (Unit 10 in Figure 1) formats the processed video information to allow it to be transmitted over a wireless video link (Column 6, lines 18 – 34).

As to claim 18, Hylton et al. teaches the limitations corresponding to claims 16 and 17 as discussed above. Hylton et al. also teaches a

Art Unit: 2614

method further comprising a packet identifier (PID) filter (Unit 15 in Figure 1) that filters out information not selected by the user from the processed video information that is transmitted over the wireless video link (Column 6, lines 10 – 15).

As to claim 25, Hylton et al. teaches a wireless video display system (Figure 1), further comprising a display processing module (Unit 10 in Figure 1) to format video information containing a large number of channels of video information to be transmitted as processed video information over a wireless video link (Column 5, lines 58 – 67, Column 6, lines 1 – 4, 18 - 24).

Hylton et al. also teaches a tuner that filters the number of channels in the processed video information relative to the number of channels in the video information (Column 29, lines 19 – 21).

Hylton et al. also teaches a PID filter (Unit 15 in Figure 1) that selects the video information to be filtered to produce the processed video information (Column 6, lines 10 – 15).

As to claim 26, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless video display system (Figure 1) further comprising a user-input device that controls the processing of the video information into processed video information (Column 8, lines 34 – 45, 60 – 67, Column 9, lines 1 – 8).

As to claim 27, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless



Art Unit: 2614

video display system (Figure 1) further comprising a wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1), wherein the display processing module (Unit 10 in Figure 1), transmits processed video information to the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) over the wireless video link (Column 6, lines 18 – 24, Column 7, lines 66 – 67, Column 8, lines 1 – 10).

As to claim 28, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless video display system (Figure 1) wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a data decompression device (Unit 129 in Figure 4, Column 14, lines 66 – 67).

As to claim 29, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless video display system (Figure 1) wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a decryption function (Unit 207 in Figure 5, Column 19, lines 13 – 16).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2614

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,708,961 (Hylton et al.) in view of U.S. Patent No. 6,263,503 (Margulis).

Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. fails to teach a wireless video display system further comprising a battery providing power to the display.

However, Margulis teaches a wireless video display system (Figure 1 of Margulis) further comprising a battery (Unit 752 in Figure 7) for providing power to the display.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1 of Hylton et al.) of Hylton et al., using the battery of Margulis, for the purpose of convenience for the user by providing flexibility to view television programming, even while performing other tasks in locations that are remote from a stationary display device (Column 1, lines 29 – 31).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,708,961 (Hylton et al.) in view of U.S. Patent Application No. 09/757,087 (Atkinson).

As to claim 5, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. fails to teach a wireless video

display system wherein the wireless video link complies with the IEEE 802.11(b) standard.

However, Atkinson teaches a wireless video display module (PDA 289) in a wireless video display system (Figure 2) wherein the wireless video link complies with the IEEE 802.11(b) standard (§ 42).

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the spread spectrum transmission method (Column 6, lines 35 – 57 of Hylton et al.), using the 802.11(b) standard, for the purpose of reducing cost by implementing a transmission technology that is readily available to the consumer.

5. Claim 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,708,961 (Hylton et al.) in view of U.S. Patent No. 6,167,514 (Matsui et al.).

As to claim 6, Hylton et al. teaches the limitations corresponding to claim 1 as discussed above. Hylton et al. fails to teach a wireless video display system wherein the wireless video link provides a secure connection, in which data being transferred is encrypted, over which the video information is received by the wireless video link.

However, Matsui et al. teaches a wireless communication system wherein the data being transmitted (S66 in Figure 11 of Matsui et al.) is encrypted (S72 in Figure 11 of Matsui et al.). This reads on to the wireless video link provides a secure connection, in which data being

Art Unit: 2614

transferred is encrypted, over which the video information is received by the wireless video link.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the wireless video display system (Figure 1 of Hylton et al.), using the encryption method of Matsui et al., for the purpose of securing data by avoiding the problem of having unprotected data intercepted by a third party (Column 1, lines 14 – 16 of Matsui et al.).

6. Claim 19 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,708,961 (Hylton et al.) in view of U.S. Patent No. 6,167,514 (Matsui et al.), and in further view of U.S. Patent No. 6,519,773 (Ahmed et al.).

As to claim 19, Hylton et al. teaches a wireless video display system (Figure 1), further comprising a display processing module (Unit 10 in Figure 1) to format video information to be transmitted as processed video information over a wireless video link (Column 5, lines 58 – 67, Column 6, lines 1 – 4, 18 – 24, Column 8, lines 6 - 10).

Hylton et al. also teaches the display processing module (Unit 10 in Figure 1) further comprising a content processor (Unit 10 in Figure 1) that processes the video information into processed video information (Column 6, lines 18 – 34).

Hylton et al. further teaches the content processor (Unit 10 in Figure 1 of Hylton et al.) encodes the video information (Column 11, lines 10 – 14 of Hylton et al.).

Hylton et al. fails to teach the content processor encrypts and forward error corrects the video information.

However, Matsui et al. teaches a content processor (Unit 1 in Figure 2) that encrypts data. This reads on to the claimed content processor that encrypts the video information.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the content processor (Unit 10 in Figure 1 of Hylton et al.), using the encryption method of Matsui et al., for the purpose of securing data by avoiding the problem of having unprotected data intercepted by a third party (Column 1, lines 14 – 16 of Matsui et al.).

Ahmed et al. further teaches a forward error correction method in the head-end (Column 3, lines 56 – 58). This reads on the claimed content processor (head-end) forward error corrects the video information.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the content processor (Head-end), using the encryption method of Ahmed et al. and the forward error correction method of Ahmed et al., for the purpose of saving costly implementations in individual video display units (Column 3, lines 56 – 58).

As to claim 20, Hylton et al. teaches the limitations corresponding to claim 19 as discussed above. Hylton et al. further teaches a wireless video display system (Figure 1 of Hylton et al.) further comprising a user-input device that controls the processing of the video information into processed video information (Column 8, lines 34 – 45, 60 – 67, Column 9, lines 1 – 8).

As to claim 21, Hylton et al. teaches the limitations corresponding to claim 19 as discussed above. Hylton et al. further teaches a wireless video display system (Figure 1 of Hylton et al.) further comprising a wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1), wherein the display processing module (Unit 10 in Figure 1) transmits processed video information to the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) over the wireless video link (Column 6, lines 18 – 34).

As to claim 22, Hylton et al. teaches the limitations corresponding to claims 19 and 21 as discussed above. Hylton et al. fails to teach a wireless video display module further comprises a first content key generator and negotiation function and the wireless video display module comprises a second content key generator and negotiation function, and wherein the first content key generator and negotiation function and the second content key generator and negotiation function are used to provide a secure connection over the wireless link.

However, Matsui et al. teaches a wireless communications system that comprises a first content key generator (Unit 102 in Figure 6) and negotiation function (Column 9, lines 1 – 4). Matsui et al. also teaches a wireless communications system that comprises a second content key generator (Unit 102' in Figure 7) and negotiation function (Column 9, lines 9 – 20). This reads on to the claimed wireless video display module further comprises a first content key generator and negotiation function and the wireless video display module comprises a second content key generator and negotiation function, and wherein the first content key generator and negotiation function and the second content key generator and negotiation function are used to provide a secure connection over the wireless link.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the wireless video display system of Hylton et al., using the encryption and decryption mechanism and methods of Matsui et al., for the purpose of securing data by avoiding the problem of having unprotected data intercepted by a third party (Column 1, lines 14 – 16 of Matsui et al.).

As to claim 23, Hylton et al. teaches the limitations corresponding to claims 19 and 21 as discussed above. Hylton et al. also teaches a wireless video system (Figure 1 of Hylton et al.) wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a data decompression device (Unit 129 in Figure 4).

Art Unit: 2614

As to claim 24, Hylton et al. teaches the limitations corresponding to claims 19 and 21 as discussed above. Hylton et al. also teaches a wireless video system (Figure 1 of Hylton et al.) wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a decryption function (Unit 207 in Figure 5, Column 19, lines 13 – 16).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,052,120 (Nahi et al.) teaches a wireless video display system. U.S. Patent No. 6,069,647 (Sullivan et al.) teaches a key generator in use with encryption. U.S. Patent No. 6,282,714 (Ghori et al.) teaches the use of a cursor. U.S. Patent No. 5,987,518 (Gotwald) teaches the use of a PID filter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai Lam whose telephone number is (571) 272-2827. The examiner can normally be reached on Monday - Friday 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\*\*

*Jason  
Sale*  
8-19-05